```
SERVER SOURCE
 readme
              Connectivity between the various Perl files
              (1) ci.pl
      2
                project.pl
      3
                  host.pl
                getsessionid.pl
                  project.pl
      7
                  webdate.pl
                -> acceptdecline.pl (by way of form submission)
      8
              acceptdecline.pl
      9
      10
                cgi.pl
                getsessionid.pl
      11
                project.pl ...
      12
                -> (2a) declined.html OR
      13
                -> (2b) ci.pl
      14
      15
              (3) save.pl
                qetsessionid.pl
      16
              (4) calculate.pl
ıD
      17
      18
                project.pl ...
1
      19
                getsessionid.pl ...
M
                -> (4a) overuse.html OR
      20
m
                -> (4b) getresults.pl (by way of META refresh)
      21
22
              (5) getresults.pl
M
                getsessionid.pl ...
      23
      24
                calculate2.pl
                  project.pl ...
      25
      26
                  getsessionid.pl ...
readstuff.pl
      27
      28
                    project.pl (?!)
qetsessionid.pl (?!)
      29
                  ansoft_files.pl
m
      30
                  remoteTLINE.pl
      31
32
                    getheadpost.pl
  all md5
       1
              MD5 checksums
              c4616dce3206bfbale1d26e910fcda19
                                                  readme
       2
       3
              f627deb66ff95612e34bbc2840b44069
                                                  all md5
              2f73d693d13e2de292c2a9a17b09bb40
                                                  acceptdecline.pl
              d4d66bd78c7e3d244a844dc8c6568d83
                                                  calculate.pl
       5
       6
              4f0ef466c56dbf48f431045b3c6b65af
                                                  calculate2.pl
              a23e93229c5cd96f44ed6bfa8cb43923
                                                  cgi.pl
       7
              3dd2bd09c6af821ac9489471e0140b51
                                                  ci.pl
       8
       9
              5f6136da8fbc267052ed9a6e1fcd86c4
                                                  getresults.pl
              7889f9cab3787db2b0a4231ec128a331
                                                  getsessionid.pl
      10
              a926a04944ceeeecaf8c5ba09675aa46
                                                  host.pl
      11
              c04024bba78bf2e5da1fc944f3c083e2
                                                  makeauth.pl
      12
              ccf4d0e44f6b7b5fa920e23ae022d46b
                                                  project.pl
      13
              f62c02714876d4686de1139739abccdf
                                                  save.pl
      14
              d30a1ca9731e7feccf5922c1681192dc
                                                  webdate.pl
      15
                                                  native_CrossSection.html
              c2898185d40e61d3e8f98add70d26f4a
      16
                                                  nav3_CrossSection.html
              2daeb6d25d7d4ffe52ed835721512f56
      17
                                                  ../../html/Stackup/declined.html
              cf20dc1f37dc1c1012fdf7fccb8117d1
      18
```

```
../../html/Stackup/error.html
      19
              90d33ac8912a6b25c3332b34dec14e71
                                                   ../../html/Stackup/overuse.html
              cd1410f9391b66a64abe3f0368f72e66
      20
  acceptdecline.pl
              #!/usr/bin/perl
       1
       2
              use strict;
       3
              my $debug;
              #$debug = 1;
       4
              if ($debug) { print "Content-Type: text/html\n\n<HTML><BODY><PRE>"; }
              require("cgi.pl");
       6
              # GLOBALS
       7
              use vars qw( $debug );
       8
       9
              require("getsessionid.pl");
              use vars qw ( $suid $user id $usage $path_info $save_copy $cookie);
      10
              my %values = &process_form();
      11
              my $time = hex( &obscure( substr($values{"token"},0,8),
      12
                                      substr($values{"token"},8,8) ) );
D
      13
              my $delay = $time+15-time();
      14
الم<sup>ا</sup>لة
المالة
              if ($debug) { print "time: $time delay: $delay\n"; }
      15
M
m
              require("project.pl");
      16
-
              use vars qw($HOST_IP);
      17
M
              use vars qw($PROJECT $USAGE_MAX $USAGE_INTERVAL $RECORD LENGTH
$NUM RECORDS);
E!
if ($values{"choice"} =~ /ACCEPT/) {
      19
14
if ($delay > 0) { sleep($delay); }
      20
M
                   print "Location: http://$HOST_IP/cgi-bin/$PROJECT/ci.pl\n";
      21
print "Pragma: no-cache\nExpires: Mon, 01 Jul 1996 00:00:00 GMT\n";
      22
                   if ($delay > -300) { print $cookie; }
Ŀ
      23
                   print "\n";
      24
      25
               else {
      26
                   print "Location: http://$HOST IP/$PROJECT/declined.html\n";
      27
                   print "Pragma: no-cache\nExpires: Mon, 01 Jul 1996 00:00:00 GMT\n";
      28
                   print "\n";
      29
      30
               }
  calculate.pl
       1
              #!/usr/bin/perl
       2
               # calculate.pl
              # Copyright (C) 1999-2000 Rode Consulting, Inc.
# All rights reserved.
       3
       4
       5
              use strict;
       6
               # GLOBALS
               use vars qw( $debug );
               #$debug = 1;
       8
```

```
require("project.pl");
       9
              use vars qw($HOST IP);
      10
              use vars qw($PROJECT $USAGE_MAX $USAGE_INTERVAL $RECORD_LENGTH
      11
  $NUM RECORDS);
              require("getsessionid.pl");
      12
              use vars qw ( $suid $new_suid $user_id $timestamp $usage $valid
      13
  $path_info $cookie);
              $USAGE MAX=10;
      15
              if ($usage >= $USAGE_MAX) {
                  print "Location: http://$HOST_IP/$PROJECT/overuse.html\n";
      16
                  print "\n";
      17
      18
                   exit(0);
      19
              }
              #print "Location: http://",$HOST_IP,"/cgi-bin/$PROJECT/calculate2.pl\n";
#print "\n";
      20
      21
      22
              # Rather than directly forward to the script that does the real
      23
calculation
              # We instead return a small HTML page that displays a message, before
      24
# forwarding to the final location.
      25
M
              my $hash = &hash($user_id);
      26
m
h
              # Write new cookie to cookie cache
      27
M
              sysopen(AUDIT_DB, "auth.dat", 2) or die("Can't open authorization
      28
اً database!");
              sysseek( AUDIT_DB, $hash*$RECORD_LENGTH, 0 );
      29
5)
              my $written = syswrite( AUDIT_DB, ($new_suid."\n"),
      30
$RECORD LENGTH );
      31
-
              die "System write error: $!\n" unless defined $written;
32
              close(AUDIT_DB);
      33
m
print "Pragma: no-cache\nExpires: Mon, 01-Jul-1996 00:00:00 GMT\n";
      34
1
              print $cookie;
      35
              print "Content-Type: text/html\n\n";
print <<"EOF"</pre>
      36
      37
               -<HTML><HEAD><TITLE>Extraction in progress...</TITLE>
      38
              <META HTTP-EQUIV="refresh" CONTENT="0;URL=http://$HOST_IP/cgi-</pre>
      39
  bin/$PROJECT/getresults.pl">
               <SCRIPT LANGUAGE="JavaScript"><!--</pre>
                     badbrowser = ((navigator.appName == "Microsoft Internet Explorer")
  && (parseInt(navigator.appVersion) == 4) && (navigator.appVersion.indexOf("Mac") >
  0));
                     if (badbrowser) this.focus();
                     if (!badbrowser && window.focus) this.focus();
      43
               //--></SCRIPT>
      44
      45
               </HEAD>
               <BODY BGCOLOR="#FFFFFF" TEXT="#000000" LINK="#0000FF" VLINK="#AA00AA"</pre>
      46
  ALINK="#FF0000">
```

```
<TABLE VALIGN=CENTER WIDTH="100%" HEIGHT="100%"><TR><TD VALIGN=CENTER
      47
  ALIGN=CENTER>
               <CENTER><H2>Please wait...<BR>Extraction in progress</H2></CENTER>
      48
               </TD></TR></TABLE>
      49
               </BODY>
      50
               </HTML>
      51
      52
               EOF
      53
                    1;
      54
  calculate2.pl
               #!/usr/bin/perl
       1
               # calculate2.pl
       2
               # Copyright (C) 1998-2000 Rode Consulting, Inc. (RCI)
       3
       4
               # All rights reserved.
       5
               use strict;
               # GLOBALS
       6
               use vars qw( $debug );
       7
       8
               \#$debug = 1;
Ō
       9
               if ($debug) {
print "Content-Type: text/html\n";
print "Pragma: no-cache\nExpires: Mon, 01 Jul 1996 00:00:00 GMT\n";
print "\n";
      10
M
      11
m
      12
13
                    print "<BODY><PRE>\n";
      14
U
      15
               }
أيحار
               require("project.pl");
       16
93
use vars qw($HOST IP);
      17
-
               #use vars qw($DOMAIN_NAME $HOST_NAME $HOST_IP $HOST_PREFIX
       18
$HOST CGI_PREFIX);
               #use vars qw($HOST_PREFIX_JAVA $HOST_CGI_PREFIX JAVA);
      19
\Box
               #use vars qw($BODY $NOCACHE_HEADER $GS $JP2GIF $ALCHEMY);
      20
#use vars qw(%HTML MACROS);
      21
use vars qw($PROJECT $USAGE_MAX $USAGE_INTERVAL);
      22
               require("getsessionid.pl");
      23
               use vars qw ( $suid $user_id $timestamp $usage $valid $path_info
      24
  $cookie);
               use vars qw( @items $user_id $root $dont_do_it $results);
       25
               use vars qw( $units name $units $scale );
      26
               my $LOCK SH=1; my $LOCK_EX=2; my $LOCK_NB=4; my $LOCK_UN=8;
      27
               if (!$dont_do_it && ($usage > $USAGE_MAX)) {
    print "Location: http://$HOST_IP/$PROJECT/overuse.html\n";
    print "\n";
       28
      29
      30
      31
                    exit(0);
       32
               }
               if (!$dont_do_it && ((time()-$timestamp) > 15)) {
       33
                    print "Location: http://$HOST_IP/$PROJECT/error.html\n";
       34
```

```
35
                    print "\n";
       36
                    exit(0);
       37
                }
                # Retrieve the binary data from a file
       38
                    if ( $dont do it ||
       39
                         ($valid >0 & -e "tmp/stuff".$user_id.sprintf("%04d",$usage)) ) {
       40
                      require("readstuff.pl");
$root = "x.pjt";
       41
               #
       42
                      require("field extractor files.pl");
       43
                #
                # Early return for use with ez2dzip.pl
       44
                      if ($dont_do_it) { return 1; }
       45
                      open(LOCKFILE, ">>tmp/lockfile");
                #
       46
                      flock(LOCKFILE, $LOCK_EX);
                #
       47
                #
                      seek(LOCKFILE, 0, 2);
       48
                      require("remoteTLINE.pl");
flock(LOCKFILE, $LOCK_UN);
       49
                #
                #
       50
                      close(LOCKFILE);
       51
                         open(SAVE, ">tmp/results". \user_id.sprintf("\u00a4d", \u00aage));
       52
                         print SAVE "DUMMY";
       53
                        close SAVE;
       54
Ŋ
       55
                    }
                    else {
       56
m
                      print "Location: http://$HOST_IP/$PROJECT/error.html\n\n";
       57
-
       58
                      exit 0;
F
       59
                    }
60
                1;
   cgi.pl
#!/usr/local/bin/perl
        1
                #Copyright (C) 1996-8 Rode Consulting, Inc. All rights reserved.
<del>أ</del>حة إ
        2
#package myCGI;
        3
m
4
                use strict;
-
        5
                # GLOBALS:
                                          The query string (source depends on
                # $cgi_query:
        6
   REQUEST METHOD)
                                    (logged by other scripts)
        7
                # TEMP %form_values is global for compatibility
        8
                # Special (evil?) mode flags:
        9
                                    Global cross-module debug flag
       10
                # $debug:
                # $ cgi lowercase:
                                          Form value names are all lowercased
       11
                use vars qw($debug $ cgi lowercase $cgi query %form values);
       12
                                    print "cgi.pl called\n";
                                                                            }
                if ($debug) {
       13
       14
                # process form()
       15
                sub process form {
                    my ($valid,@pairs) = ("",(""));
       16
```

```
| | | = 1;
      17
                                 print "Method: ", $ENV{'REQUEST_METHOD'}, "<BR>\n";
              if ($debug) {
      18
                   $valid = "";
      19
                   if ($ENV{'REQUEST_METHOD'} eq 'GET')
      20
      21
                   {
                     $cgi_query = $ENV{'QUERY_STRING'};
$valid = ($ENV{'QUERY_STRING'}) ? "true" : "";
      22
      23
      24
                   elsif ($ENV{'REQUEST_METHOD'} eq 'POST')
      25
      26
                     $valid = ($ENV{'CONTENT_LENGTH'} > 0) ? "true" : "";
      27
                     if ($valid) { read(STDIN, $cgi_query, $ENV{'CONTENT_LENGTH'}); }
      28
                     c_q = s/n/(k/g)
      29
      30
                   elsif ($debug) { print "Unrecognized method:
      31
  $ENV{'REQUEST_METHOD'}\n"; }
                                        print "CGI arguments: ", $cgi_query, "<BR>\n";
                                 {
                   if ($debug)
      32
ø
      33
                   if ($valid)
١٠.
      34
                   {
                     @pairs = split(/&/, $cgi_query);
M
      35
                     foreach my $pair (@pairs)
      36
m
      37
<u>_</u>
                         pair = ~ s/++/+/g;
      38
In
                         pair = ~ s/+//g;
      39
                         my ($name, $value) = split(/=/, $pair);
أيدن
      40
                         name = s/%([a-fA-F0-9]{2})/pack('c',hex($1))/eg;
      41
8)
                         value = s/{([a-fA-F0-9]{2})/pack('c',hex($1))/eg};
      42
value =  s/{2[Ff]///g;}
      43
                         if ($_cgi_lowercase) { $name =~ tr/A-Z/a-z/; }
14
      44
                         if ($form values{$name})
45
                         { $form_values{$name} .= "&" . $value;
                                                                        }
      46
m
      47
{ $form_values{$name} = $value; }
      48
                                               print $name, " = '", $form_values{$name},
                         if ($debug)
      49
  "'\n";
              }
      50
                     }
      51
                   %form values;
      52
               }
      53
               # get_cookie( -cookiename- )
      54
               # Returns the first cookie by the given name
      55
      56
               sub get_cookie {
                   my ($cookie) = @_;
      57
                   my (@cookies, $cookieName, $cookieVal) = ((""),"","");
      58
                   if ($debug) { print "HTTP_COOKIE: ",$ENV{"HTTP_COOKIE"},"\n"; }
      59
                   if ($ENV{"HTTP_COOKIE"} =~ /$cookie/)
      60
      61
                   {
                     @cookies = split(/;\s*/,$ENV{"HTTP COOKIE"});
      62
```

```
if ($debug) { print '@cookies: ',@cookies,"\n"; }
      63
      64
                      foreach (@cookies)
       65
      66
                          if ($_ =~ /$cookie/)
      67
      68
                            ($cookieName, $cookieVal) = split (/=/,$_);
       69
                            return($cookieVal);
       70
       71
       72
                      }
       73
                    else { return(''); }
       74
       75
               }
               ##@LOOKUP = split(/Name:/,'nslookup $ENV{"REMOTE_ADDR"}');
       76
               ##@LOOKUP = split(/Address:/, $LOOKUP[1]);
       77
               ##$client name = $LOOKUP[0];
       78
               #$client_name = $ENV{"REMOTE_ADDR"};
       79
               #$client_name =~ s/ //g;
       80
               #package form;
       81
       82
1;
O
  ci.pl
الي: ا
               #!/usr/bin/perl
M
               use strict;
        2
m
H
               # GLOBALS
        3
n
               use vars qw( $debug );
        4
,-J
        5
               my $debug;
               #$debug = 1;
        6
               if ($debug) { print "Content-Type: text/html\n\n<HTML><BODY><PRE>"; }
        7
-
                require("project.pl");
        8
               use vars qw($DOMAIN_NAME $HOST_NAME $HOST_IP $HOST_PREFIX
        9
   $HOST CGI PREFIX);
                use vars qw($PROJECT $USAGE MAX $USAGE_INTERVAL $RECORD_LENGTH
$NUM RECORDS);
                require("getsessionid.pl");
       11
                use vars qw ( $suid $user_id $usage $path_info $save_copy $cookie);
       12
                if ($debug) {
       13
                    print $suid," ", $user_id," ", $usage," ", $path_info," ", $cookie;
       14
       15
               print "Content-Type: text/html\n";
print "Pragma: no-cache\nExpires: Mon, 01 Jul 1996 00:00:00 GMT\n";
       16
       17
                print "\n";
       18
                if (length($suid) > 0) {
       19
                    if ( !(\$ENV{"HTTP\_USER\_AGENT"}) = ~ /3.0/) ) {
       20
                      open(HTML, "native CrossSection.html");
       21
       22
                             open(HTML, "nav3 CrossSection.html"); }
       23
                    else {
```

```
read(HTML, my $html, 1000000);
      24
      25
                    close(HTML);
                    $html =~ s/<HOST IP>/$HOST IP/g;
      26
                    print $html;
       27
       28
               }
               else { # New cookie
       29
                      open(DISCLAIMER, "../../html/netsim/termsofuse.html");
read(DISCLAIMER, my $disclaimer, 1000000);
       30
       31
                      close(DISCLAIMER);
       32
                      my $time = sprintf("%08x",time());
       33
                      my $mask = substr(&sumcheck($time),0,8);
       34
                      my $token = &obscure($time,$mask).$mask;
       35
                      $disclaimer =~ s/<!-- marker1 -->/ \(Please read carefully then
       36
  click <B>ACCEPT<\/B> or <B>DECLINE<\/B> at the bottom of this page\)/;
                      my $replacement = <<"EOF"
       37
38
                <CENTER>
                <APPLET CODE="AcceptDecline.class" CODEBASE="http://$HOST_IP/$PROJECT/"</pre>
       39
Đ
  WIDTH=250 HEIGHT=40>
                <PARAM NAME=token VALUE="$token">
       40
M
                </APPLET>
       41
                </CENTER>
m
       42
       43
                EOF
<u>-</u>
       44
M
                      Sdisclaimer =~ s/<!-- marker2 -->/$replacement/;
       45
14
                      print $disclaimer;
       46
31
       47
                }
1
                exit(0);
       48
getresults.pl
                #!/usr/bin/perl
        1
[LE
        2
                use strict;
                require("getsessionid.pl");
        3
               use vars qw( $debug );
use vars qw( $suid $new_suid $user_id $usage $path_info $save_copy
        4
        5
  $cookie);
                my $results_filename = "tmp/results".$user_id.sprintf("%04d",$usage);
        6
                if (! (-e $results_filename) ) {
        7
                    open(SAVE, ">$results_filename");
        8
                    close(SAVE);
        9
                    require "calculate2.pl";
       10
       11
                }
                print "Content-Type: text/html\n";
       12
                print "Pragma: no-cache\nExpires: Mon, 01 Jul 1996 00:00:00 GMT\n";
       13
                print "\n";
       14
                print "<HTML><HEAD>\n";
       15
                print "<TITLE>Field Extraction Results</TITLE>\n";
       16
```

```
print "<SCRIPT LANGUAGE=\"JavaScript\"><!--\n";</pre>
      17
               print "
                            badbrowser = ((navigator.appName == \"Microsoft Internet
  Explorer\") && (parseInt(navigator.appVersion) == 4) &&
  (navigator.appVersion.indexOf(\"Mac\") > 0));\n";
                            if (badbrowser) this.focus(); \n";
               print "
               print "
                            if (!badbrowser && window.focus) this.focus(); \n";
      20
               print "//--></script>\n";
      21
               print "<STYLE TYPE=\"text/css\">\nBODY
                                                             { font-size:10pt }\n
                                         { font-size:20pt }\n
                                                                  Н3
                                                                           { font-size:16pt
         { font-size:24pt }\n
                                  H2
                                                { font-size:10pt }\n</STYLE>\n";
        TABLE { font-size:10pt }\n
                                          TD
  }\n
               print '</HEAD>';
      23
               print '<BODY BGCOLOR="#FFFFFF" TEXT="#000000" LINK="#0000FF"
  VLINK="#AA00AA" ALINK="#FF0000">',"\n";
      25
               my $results;
               open(STUFF, $results_filename);
      26
               read(STUFF, $results, 1000000);
      27
               close(STUFF);
      28
               if ($results =~ /ERROR/ || length($results) == 0) {
      29
                   print "<CENTER>\n";
      30
                   print "<TABLE><TR><TD WIDTH=\"80%\">\n";
      31
print "<BR><H3>We're sorry, but an error occurred attempting to
      32
  extract this geometry. <BR> Please check for overlapping elements and try
again.</H3>\n";
                   print "</TD></TR></TABLE>\n";
print "</CENTER>\n";
M
      33
      34
m
                   print "</BODY></HTML>\n";
      35
1
      36
                   exit 1;
П
      37
1.4
      38
               else {
81
               # POST PROCESS RESULTS INTO HTML (THIS IS A PLACEHOLDER)
      39
print "<CENTER>\n";
print "<H3>Complete</H3>";
      40
<u>|</u>
      41
                   print "</CENTER>\n";
print "</BODY></HTML>\n";
      42
      43
n
      44
                   exit 0;
               }
      45
      46
               sub pretty() {
                   my $precision = pop(@_);
      47
                   my next{snumber} = pop(0);
my next{snumber}, e'', 0;
       48
      49
                   if ($index < 0) { $index = index $number, "E", 0; }</pre>
      50
                    if ($index>0 && $index > $precision) {
       51
                      return substr($number,0,$precision).substr($number,$index);
       52
       53
                    else { if ($index>0) { return $number; }
       54
                         else { return substr($number,0,$precision); }
      55
                       }
      56
       57
               }
  qetsessionid.pl
               #!/usr/bin/perl
       1
               #Copyright (C) 1997-2000 Rode Consulting, Inc.
       2
        3
               #All rights reserved.
        4
               use strict;
```

```
5
              use MD5;
              require("project.pl");
              use vars qw($DOMAIN_NAME $HOST_NAME $HOST_IP $HOST PREFIX
 $HOST CGI PREFIX);
              use vars qw($HOST_PREFIX_JAVA $HOST_CGI_PREFIX_JAVA);
       8
              use vars qw($BODY $NOCACHE_HEADER $\overline{G}S $\overline{J}P2GIF \overline{A}LCHEMY);
       9
     10
              use vars qw(%HTML MACROS);
              use vars qw($PROJECT $USAGE_MAX $USAGE_INTERVAL $NUM_RECORDS
      11
 $RECORD LENGTH);
              require("webdate.pl");
      12
      13
              # GLOBALS
              use vars qw( $debug );
      14
              use vars qw ( $suid $new_suid $user_id $timestamp $usagestamp $usage
      15
 $valid $path_info $cookie);
              my $COOKIE LENGTH = 35;
      16
      17
              \#$debug = 1;
Þ
              if ($debug) {
   print "Content-type: text/html\n\n<HTML><BODY><PRE>\n";
      18
19
                  print "path_info: $ENV{'PATH_INFO'}\ncookie: $ENV{'HTTP COOKIE'}\n";
20
      21
              }
m
14
              # Any old random number will do (32 bytes)...
      22
              my $local cryptkey =
      23
  baceeed5e3ff05b81b3688c1e10b914bd2a1518edb6c9090358eb21ccef6da82";
              sub obscure() {
      24
my $mask = pop @_
      25
                  my $target = pop @_;
]ub
      26
my $obscured = "";
      27
m
                   for (my $i=0; $i<length($target); $i++) {</pre>
      28
                     $obscured .= sprintf( "%1x", hex(substr($target,$i,1)) ^
hex(substr($mask,$i,1)) ^ hex(substr($local_cryptkey,$i,1)) );
                  return $obscured;
      31
      32
              }
              sub sumcheck() {
      3.3
      34
                  my $source = pop @ ;
                   my $sum = 'echo $source | md5sum 2>/dev/null';
      35
      36
                    sum = ~ s/s*-s*//g;
                  my \ \$md5 = new \ MD5;
      37
                   \bar{nd5}->add($source."\n");
      38
                  my $sum = unpack( "H32", $md5->digest() );
      39
      40
                  return $sum;
              }
      41
              sub encode suid() {
      42
                  my $usage = pop @_;
      43
```

```
my $usagestamp = pop @_;
       44
                   my $timestamp = pop @_;
       45
                   my $user_id = pop @_;
       46
               #open(LOGFILE,">>logfile");
#print LOGFILE "E $user_id $timestamp $usagestamp $usage\n";
       47
       48
               #close(LOGFILE);
       49
                   my $combined =
  $user id.sprintf("%08x%08x%04d",$timestamp,$usagestamp,$usage);
                   my $sum = &sumcheck($combined);
                   sum = ~ s/^0*//g;
       52
                   $sum = substr($sum.$sum,0,$COOKIE LENGTH);
       53
                   my $obscured = &obscure($combined,$sum);
       54
                   return $obscured.$sum;
       55
       56
               }
       57
               sub decode suid() {
                   my $encoded = pop @ ;
       58
                   my $unobscured =
J
  &obscure(substr($encoded,0,$COOKIE_LENGTH),substr($encoded,$COOKIE_LENGTH,$COOKIE_LE
`⊎ NGTH));
M
                   my $user_id = substr($unobscured,0,15);
       60
m
                   my $timestamp = hex substr($unobscured, 15,8);
       61
1
                   my $usagestamp = hex substr($unobscured,23,8);
       62
M
                   my $usage = hex substr($unobscured, 31,4);
       6.3
#open(LOGFILE,">>logfile");
       64
               #print LOGFILE "D $user_id $timestamp $usagestamp $usage\n";
       65
#close(LOGFILE);
       66
my $valid = 0;
       67
                   if ( $encoded eq &encode_suid($user_id, $timestamp, $usagestamp,
       68
T
  $usage) ) { $valid = 1; }
return ($user id, $timestamp, $usagestamp, $usage, $valid);
69
       70
               }
               # GET USER ID, USAGE AND PATH_INFO
       71
               $path info = $ENV{'PATH_INFO'};
       72
               $path_info =~ s/[<>!&\~]//g;
       73
                                               # don't allow uptree accesses
       74
               path info =  s/\.{2,}//g;
               \frac{-\infty}{100} = -\infty /(2,)/(/g;
       75
               $path_info =~ /()/; # Clear $1
       76
               $path_info =~ s#/([^\/]*)/?##;
       77
               valid = 0;
       78
               $suid = "":
       79
               if ( \$ENV{'HTTP\_COOKIE'} = \ /SUID2\s*=\s*(\w*)/ ) {
       80
                    suid = 1;
       81
                    suid = - s/s*//q;
       82
                    ($user_id, $timestamp, $usagestamp, $usage, $valid) =
   &decode_suid($suid);
```

```
# Some of the cookies are cached in a database.
              # This code is intended to randomly audit the cookie data
      85
              # to make sure it isn't corrupt or counterfeited.
      86
                   sysopen(AUDIT_DB, "auth.dat", 2) or die("Can't open authorization
  database!");
                  my $hash = &hash($user_id);
      88
                   sysseek( AUDIT_DB, $hash*$RECORD_LENGTH, 0 );
      89
                   sysread( AUDIT_DB, my $record, $RECORD_LENGTH-1 ); # skip newline
      90
                   (my $prev user id, my $prev_timestamp, my $prev_usagestamp, my
 $prev_usage, my $prev_valid) =
      92
                     &decode suid($record);
      93
                   close(AUDIT DB);
                   if ( $prev valid && ($prev user_id eq $user_id) &&
      94
                     ($prev_usagestamp eq $usagestamp) && ($usage < $prev_usage) ) {
      95
                     $valid = 0; # Apparently the cookie is fake
      96
      97
              # If more than 24 hours (or some other time limit) has passed,
      98
      99
              # reset the usage count
                   if ( (time()-$usagestamp) > $USAGE_INTERVAL ) {
     100
Ф
                     $usagestamp = time();
     101
     102
                     susage = -1;
M
     103
                   }
m
                   if ($usage > $USAGE_MAX) {
     104
l-b
                     valid = 0;
     105
M
     106
                   }
·...
              # DOS inhibition
     107
                   if ( !( $ENV{"HTTP_USER_AGENT"} =~ /Mozilla/ ) ) {
     108
Sleep(15+rand(10)); return 0; }
4
     109
              else { # No cookie - create a new one
110
                   (my sip = SENV{"REMOTE\_ADDR"}) =~ s/\./:/g;
     111
m
                   (my $a, my $b, my $c, my $d) = split(":",$ip);
     112
sip = (((sa*256+sb)*256+sc)*256+sd);
     113
                   my $rand = int(rand(2**24));
$user_id = sprintf("Z%08x%06x",$ip,$rand);
     114
     115
     116
                   $usagestamp = time();
                   susage = -1;
     117
              }
     118
              $new suid = &encode suid($user_id, time(), $usagestamp, $usage+1);
     119
              # Expire cookie in 90 days
$cookie = "Set-Cookie: SUID2=$new_suid;
     120
     121
  expires=".&RFC950date(time()+7*24*3600)."; path=/cgi-bin/$PROJECT/;
  domain=$HOST IP\n";
              if ($debug) { print "Using PATH_INFO...\n"; }
     122
              if ($debug) { print "SUID: ",$suid," ","PATH_INFO: ",$path_info,"\n"; }
     123
     124
              1;
  host.pl
```

```
#!/usr/bin/perl
         1
                 #Copyright (C) 1997-2000 Rode Consulting, Inc.
         2
         3
                 #All rights reserved
         4
                 use strict;
                 use vars qw($DOMAIN_NAME $HOST_NAME $HOST_IP $HOST PREFIX
   $HOST CGI PREFIX);
                 use vars qw($HOST_PREFIX_JAVA $HOST_CGI_PREFIX_JAVA);
                 use vars qw($BODY $NOCACHE HEADER);
         7
         8
                 use vars qw(%HTML MACROS);
                 $DOMAIN_NAME="circuitsim.com";
         9
                 $HOST NAME = "www.". $DOMAIN NAME;
        10
                 $HOST IP = "24.218.251.135";
        11
                 my $PREFIX = "Stackup/patent";
        12
                 $HOST_PREFIX = "http://$HOST_NAME/$PREFIX/";
$HOST_CGI_PREFIX = "http://$HOST_NAME/cgi-bin/$PREFIX/";
$HOST_PREFIX_JAVA = "http://$HOST_IP/$PREFIX/";
$HOST_CGI_PREFIX_JAVA = "http://$HOST_IP/cgi-bin/$PREFIX/";
$BODY = '<BODY BGCOLOR="#FFFFFF" TEXT="#000000" LINK="#0000FF"
        13
        14
        15
        16
        17
   VLINK="#AA00AA" ALINK="#FF0000">';
ű
                 $NOCACHE_HEADER = "Pragma: no-cache\nExpires: Mon, 01 Jul 1996 00:00:00
        18
`≒ GMT\n";
M
                 $HTML_MACROS{"DOMAIN_NAME"} = '$DOMAIN_NAME';
$HTML_MACROS{"HOST_NAME"} = '$HOST_NAME';
$HTML_MACROS{"HOST_IP"} = '$HOST_IP';
        19
m
        20
-
        21
                  $HTML_MACROS{"HOST_PREFIX"} =
Ŋ
                                                              '$HOST PREFIX';
        22
                  $HTML MACROS{"HOST_CGI PREFIX"} =
                                                              '$HOST_CGI_PREFIX';
        23
                 24
                                                                     '$HOST CGI PREFIX JAVA';
        25
26
1
        27
        28
$HTML MACROS{"SESSIONIDMACRO"} = '$session_id_macro';
        29
m
        30
                  1;
makeauth.pl
                  #!/usr/bin/perl
         1
                  require("project.pl");
         2
                 my $nothing = "";
         3
                  for (my $i=0; $i<$RECORD_LENGTH-1; $i++) {
         4
         5
                      $nothing .= " ";
         6
         7
                 open(AUTH, ">auth.dat");
                  for (my $i=0; $i<$NUM_RECORDS; $i++) {
         8
                      print AUTH $nothing,"\n";
        10
   project.pl
                  #!/usr/bin/perl
         1
                  #Copyright (C) 1997 Rode Consulting, Inc.
         2
         3
                  #All rights reserved.
```

```
use strict;
               use vars qw($PROJECT $USAGE_MAX $USAGE_INTERVAL $NUM_RECORDS
  $RECORD LENGTH);
               $PROJECT = "Stackup";
        6
        7
               SUSAGE_MAX = 10;
               \$USAGE INTERVAL = 12*3600;
        8
               NUM_RECORDS = 10000;
       9
      10
               RECORD LENGTH = 71;
               use vars qw($DOMAIN_NAME $HOST_NAME $HOST_IP $HOST PREFIX
   $HOST CGI PREFIX);
               use vars qw($HOST_PREFIX_JAVA $HOST_CGI_PREFIX_JAVA);
      1\overline{2}
               use vars qw($BODY $NOCACHE_HEADER $GS $JP2GIF $ALCHEMY);
      13
               use vars qw(%HTML_MACROS);
      14
       15
               # Not a general purpose hash -
               # intended to use positions 5-11 inclusive of user id
       16
       17
               sub hash() {
                   my $seed = pop @_;
       18
                   srand( hex substr(\$seed,5,7) );
       19
D
                   return int(rand($NUM_RECORDS));
       20
       21
M
               require("host.pl");
       22
M
14
       23
M
  save.pl
               #!/usr/bin/perl
        1
8;
               # Copyright 1999-2000 Rode Consulting, Inc.
        2
# All rights reserved
        3
4
               use strict;
\Box
        5
               require("getsessionid.pl");
use vars qw( $debug );
        6
               use vars qw ( $suid $user_id $timestamp $usage $valid $path info
        7
   $cookie);
        8
               my $cgi_query;
               read(STDIN, $cgi_query, $ENV{'CONTENT_LENGTH'});
        9
               print "Content-Type: text/plain\n";
       10
               print "Pragma: no-cache\nExpires: Mon, 01 Jul 1996 00:00:00 GMT\n";
       11
               print "\n";
       12
               if (length($user_id) > 0) {
       13
                    'rm -f tmp/*$user_id*'
       14
                    open(STUFF, ">tmp/stuff".$user_id.sprintf("%04d",$usage+1));
       15
                    print STUFF $cgi_query;
       16
                   close(STUFF);
       17
                   print "OK\n";
       18
       19
               else { print "ERROR\n"; }
       20
   webdate.pl
```

```
1
               #!/usr/bin/perl
               #Copyright (C) 1997 Rode Consulting, Inc.
       2
       3
              #All rights reserved.
       4
              use strict:
       5
               # GLOBALS
               use vars qw( $debug );
       6
               sub zeropad2 {
       7
       8
                   my number = pop(0);
       9
                   my $padded;
                   if ($number < 10) { $padded = "0".$number; }
else { $padded = "" . $number; }</pre>
      10
      11
      12
                   $padded;
      13
               }
      14
               sub RFC950date {
      15
                   my time = pop(0);
                   (my $sec,my $min,my $hour,my $mday,my $mon,my $year,my $wday,my
      16
$\text{3}\text{yday,my $isdat} = gmtime($time);
                   if ($year < 1970) { $year += 1900; }
      17
Ū
                   if ($year < 1970) { $year += 100; }
      18
h<sub>ru</sub>
M
                    $formatted='/usr/local/bin/date -d '$time seconds' '+%A, %d-%b-%y
      19
T%T GMT' --universal';
       ("Sunday", "Monday", "Tuesday", "Wednesday", "Thursday", "Friday", "Saturday")[$wday
      20
H
Шŋ.
                      &zeropad2($mday) . "-" .
      21
äi
        ("Jan", "Feb", "Mar", "Apr", "May", "Jun", "Jul", "Aug", "Sep", "Oct", "Nov", "Dec")[$ mon
"_
4
                      $year . " "
      23
الم
                      &zeropad2($hour) . ":" . &zeropad2($min) . ":" . &zeropad2($sec) .
      24
    GMT";
m
      25
               }
sub modified {
      26
                   my file = pop(@_);
      27
                   (my $dev,my $ino,my $mode,my $nlink,my $uid,my $gid,my $rdev,my
  $size,my $atime,my $mtime,my $ctime,my $blksize,my $blocks) = stat($file);
                   if ($debug) { print "Modified: ",$mtime," ",time(),"\n"; print $^T;
      29
  }
      30
                   &RFC950date($mtime);
               }
      31
      32
               1;
  native CrossSection.html
               <HTML>
       1
               <HEAD>
       2
               <TITLE>EXPERIMENTAL PCB Cross Section Editor</TITLE>
       3
               </HEAD>
       4
               <BODY BGCOLOR="#FFFFFF" TEXT="#000000" LINK="#0000FF" VLINK="#AA00AA"</pre>
  ALINK="#FF0000">
```

```
<APPLET CODE="CrossSection.class" CODEBASE="http://<HOST_IP>/Stackup/"
       6
  ARCHIVE="CrossSection.jar" WIDTH=1024 HEIGHT=540>
              <PARAM NAME=addgeometry VALUE=ENABLE>
              <PARAM NAME=userid VALUE="0000000">
       8
              </APPLET><BR><BR>
       9
              <!-- Instructions deleted -->
              </BODY>
      11
              </HTML>
      12
  nav3 CrossSection.html
              <HTML>
              <HEAD>
       2
              <TITLE>EXPERIMENTAL PCB Cross Section Editor</TITLE>
       3
              <BODY BGCOLOR="#FFFFFF" TEXT="#000000" LINK="#0000FF" VLINK="#AA00AA"</pre>
  ALINK="#FF0000">
              <APPLET CODE="CrossSection.class" CODEBASE="http://<HOST_IP>/Stackup/"
  ARCHIVE="CrossSection.zip" WIDTH=1024 HEIGHT=540>
              <PARAM NAME=addgeometry VALUE=ENABLE>
              <PARAM NAME=userid VALUE="0000000">
       8
</APPLET><BR><BR>
       9
T,
              <!-- Instructions deleted -->
      10
М
              </BODY>
      11
M
      12
              </HTML>
1
   ./../html/Stackup/declined.html
1
              <HEAD><TITLE>Declined</TITLE></HEAD>
       2
2:
              <BODY BGCOLOR="#FFFFFF" TEXT="#000000" LINK="#0000FF" VLINK="#AA00AA"</pre>
       3
  ALINK="#FF0000">
4
              Sorry you feel that way...
m
       5
              </BODY>
</HTML>
       6
  ../../html/Stackup/error.html
              <HTML>
       1
               <HEAD>
       2
       3
               <TITLE>Extracting geometry...</TITLE>
               <SCRIPT LANGUAGE="JavaScript"><!--</pre>
       4
                     badbrowser = ((navigator.appName == "Microsoft Internet Explorer")
  && (parseInt(navigator.appVersion) == 4) && (navigator.appVersion.indexOf("Mac") >
  0));
                     if (badbrowser) this.focus();
       6
                     if (!badbrowser && window.focus) this.focus();
       7
               //--></SCRIPT>
       8
               </HEAD>
       9
              <BODY BGCOLOR="#FFFFFF" TEXT="#000000" LINK="#0000FF" VLINK="#AA00AA"</pre>
      10
  ALINK="#FF0000">
               <TABLE VALIGN=CENTER WIDTH="100%" HEIGHT="100%"><TR><TD VALIGN=CENTER
      11
  ALIGN=CENTER><CENTER>
               <H2>We're sorry an ERROR occurred in processing your data.<BR>
      12
               Please try again later.</H2>
```

## Christian S. Rode (RCI003v2R)

```
<H3><I>Cookies must be enabled!</I></H3>
      14
               </CENTER></TD></TR></TABLE>
      15
               </BODY>
      16
              </HTML>
      17
  ../../html/Stackup/overuse.html
              <HTML>
               <HEAD>
       2
              <TITLE>Extracting geometry...</TITLE>
<SCRIPT LANGUAGE="JavaScript"><!--
       3
                     badbrowser = ((navigator.appName == "Microsoft Internet Explorer")
 && (parseInt(navigator.appVersion) == 4) && (navigator.appVersion.indexOf("Mac") >
 0));
                     if (badbrowser) this.focus();
                     if (!badbrowser && window.focus) this.focus();
       7
               //--></SCRIPT>
       8
               </HEAD>
       9
               <BODY BGCOLOR="#FFFFFF" TEXT="#000000" LINK="#0000FF" VLINK="#AA00AA"</pre>
      10
 ALINK="#FF0000">
               <TABLE VALIGN=CENTER WIDTH="100%" HEIGHT="100%"><TR><TD VALIGN=CENTER
      11
ALIGN=CENTER><CENTER>
               <H2>We're sorry but you've exceeded your<BR>extraction quota for
ď
      12
્યુtoday.<BR><BR>
              Please try again tomorrow.</H2>
</CENTER></TD></TR></TABLE>
      13
M
      14
m
               </BODY>
      15
</HTML>
      16
IJ
, F
14
m
```